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Description of a new *Torodora* Meyrick, 1894 species from China (Lepidoptera: Lecithoceridae)

M. Zhang, Y. Zhu & H. Li

Abstract

Torodora crassidigitata Li, sp. n. is described from Yunnan, China. A comparison of the new species with *T. parotidosa* (Wu, 1994) is given. Photographs of the adults and genitalia are provided.

KEY WORDS: Lepidoptera, Lecithoceridae, *Torodora*, new species, China.

Descripción de una nueva especie de *Torodora* Meyrick, 1894 de China (Lepidoptera: Lecithoceridae)

Resumen

Se describe *Torodora crassidigitata* Li, sp. n. capturada en Yunnan (China). Se compara la nueva especie con *T. parotidosa* (Wu, 1994). Se proporcionan fotografías de los adultos y de la genitalia.

PALABRAS CLAVE: Lepidoptera, Lecithoceridae, *Torodora*, nueva especie, China.

Introduction

The genus *Torodora* Meyrick, 1894 was established with *T. characteris* Meyrick, 1894 as the type species. It is a large oriental genus belonging to the subfamily Torodorinae, comprising more than 130 species (GOZMÁNY, 1978; WU & PARK, 1999; PARK, 2002; PARK *et al.*, 2006; PARK, 2007a, 2007b; PARK, 2008a, 2008b). 45 species were recorded in China prior to this study (WU, 1994, 1997a, 1997b, 1999; PARK & HEPPNER, 2000; PARK 2003a, 2003b). The genus is represented by the hooked gnathos, the foot-shaped or variously elongated valva, and the strong spinous zones on the tergites of the abdomen. However, these characters are not unique of *Torodora*, but common within its allied genera, e. g. *Thubana* Walker, 1864 and *Deltoplastis* Meyrick, 1925. Thus, it can be distinguished by the wing venation.

In the present paper, we describe one new species based on the specimens collected from Yunnan Province, China. Comparison of the new species with its closely allied species *T. parotidosa* (Wu, 1994) is also made.

The type specimens are deposited in the Insect Collection, College of Life Sciences, Nankai University, Tianjin, China.

Torodora crassidigitata Li, sp. n. (Figs. 1, 3, 4, 6)

Material examined: Holotype ♂, CHINA: Ruili (24° 01' N, 97° 5' E), Yunnan Province, 1000 m, 6-VIII-2005, coll. Yingdang Ren, genitalia slide no. ZYM06271. Paratypes: 1 ♀, same data as holotype; 2 ♂♂, Mengyang (22° 04' N, 100° 53' E), Yunnan Province, 1000 m, 17-20-VIII-2005, same collector; 1 ♀,

same data as holotype except dated 5-VIII-2005; 1 ♀, Mengla (21° 29' N, 101° 33' E), Yunnan Province, 650 m, 22-VIII-2005, same collector.

Adult (Figs. 1, 3): Wingspan 18.0-20.5 mm. Head, tegula and thorax fuscous, with copper lustre. Antenna pale yellow, nearly as long as forewing. Labial palpus (Fig. 1a) yellow; second segment in male thickened with long yellow scale tufts beneath, brush-like in shape, second segment in female without conspicuous long scale tufts (Fig. 3); third segment thin and pointed, a little longer than second. Forewing fuscous, narrow and elongate, slightly protruded at apex; termen slightly concave inward below apex; tornus bluntly rounded; costal margin with a small yellowish white spot at distal 1/4; cell with an obvious deep brown discal spot; cilia fuscous. Hindwing and cilia pale brown. Fore leg pale yellow on ventral surface, fuscous on dorsal surface; mid leg pale yellow, femur fuscous in distal portion; hind leg fuscous on femur and tibia, pale yellow on tarsus, tibia with long scales.

Male genitalia (Fig. 4): Uncus wide at base, tapering to pointed apex. Gnathos bent to ventral surface by nearly 90° degree, thin and pointed apically, beak-shaped. Valva broad in basal 1/3, narrowest at 2/5, widened from middle to before apex, rounded at apex, spoon-like in distal 2/3. Juxta wide, with paired strong digitate or thumb-like caudal processes, mastoid and setose distally. Aedeagus slightly shorter than length of valva, basal portion about 1.5 times as wide as that of valva, distal 1/4 narrowed toward apex, weakly sclerotized distally; cornuti consisting of three long sheeted plates, one plate spiralled basally, twisted at distal 1/3, another two plates bearing dense spines.

Female genitalia (Fig. 6): Apophysis anteriores about 1/4 as long as apophysis posterioris. Eighth sternite concave at middle on posterior margin. Ductus bursae long, coiled, with sparse teeth; ductus seminalis from posterior 1/3, with dense granules; bulla seminalis a little smaller than corpus bursae, thickened with fine spines. Corpus bursae ovate, about 1/4 as long as ductus bursae; densely spined and heavily sclerotized signum dumbbell-shaped, shrunk medially, bluntly rounded at both end.

Diagnosis: *Torodora crassidigitata* Li, sp. n. is similar to *T. parotidosa* (Wu, 1994), but can be differentiated by the following characters: the second segment of the male labial palpus bearing brush-like scale tufts beneath (Fig. 1a); the fuscous-colored forewing with a yellowish white spots at costal 1/4; the valva conspicuously widened before apex; the juxta with a pair of thumb-like caudal processes; and the cornuti consisting of three elongate plates in the male genitalia. In *T. parotidosa*, the forewing is fulvous in color, with one discontinuous yellowish white fascia extending from costal 1/4 to dorsal 1/5, forming small spot at costa and dorsum respectively (Fig. 2); the valva is not widened conspicuously before apex, the juxta bears a pair of basally triangular caudal processes, and the cornuti consist of two plates (Fig. 5).

Distribution: China (Yunnan).

Etymology: The specific name is derived from the Latin prefix *crass-* = thick and the Latin *digitatus* = digitate, referring to the stout digitate caudal process of the juxta in the male genitalia.

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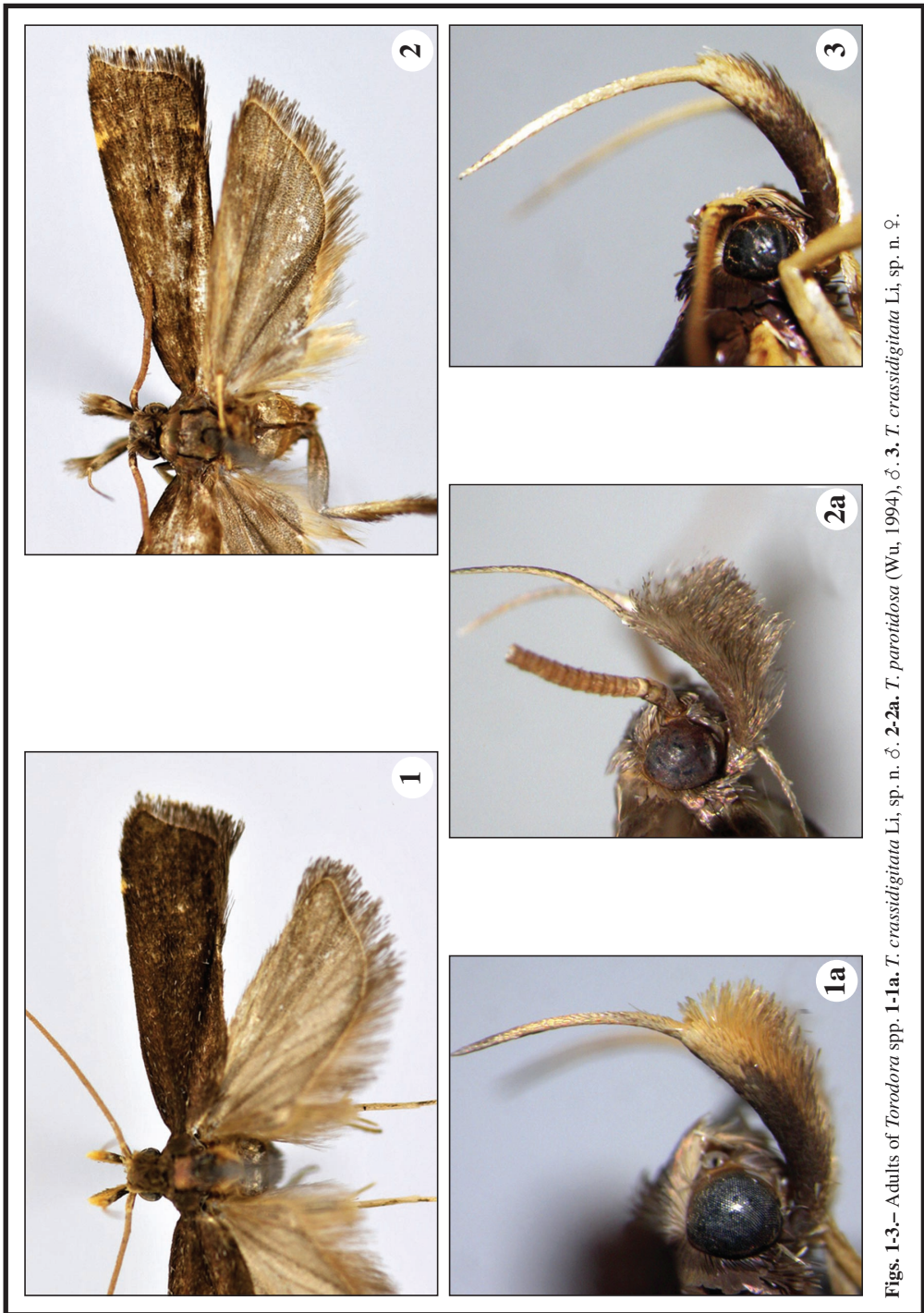
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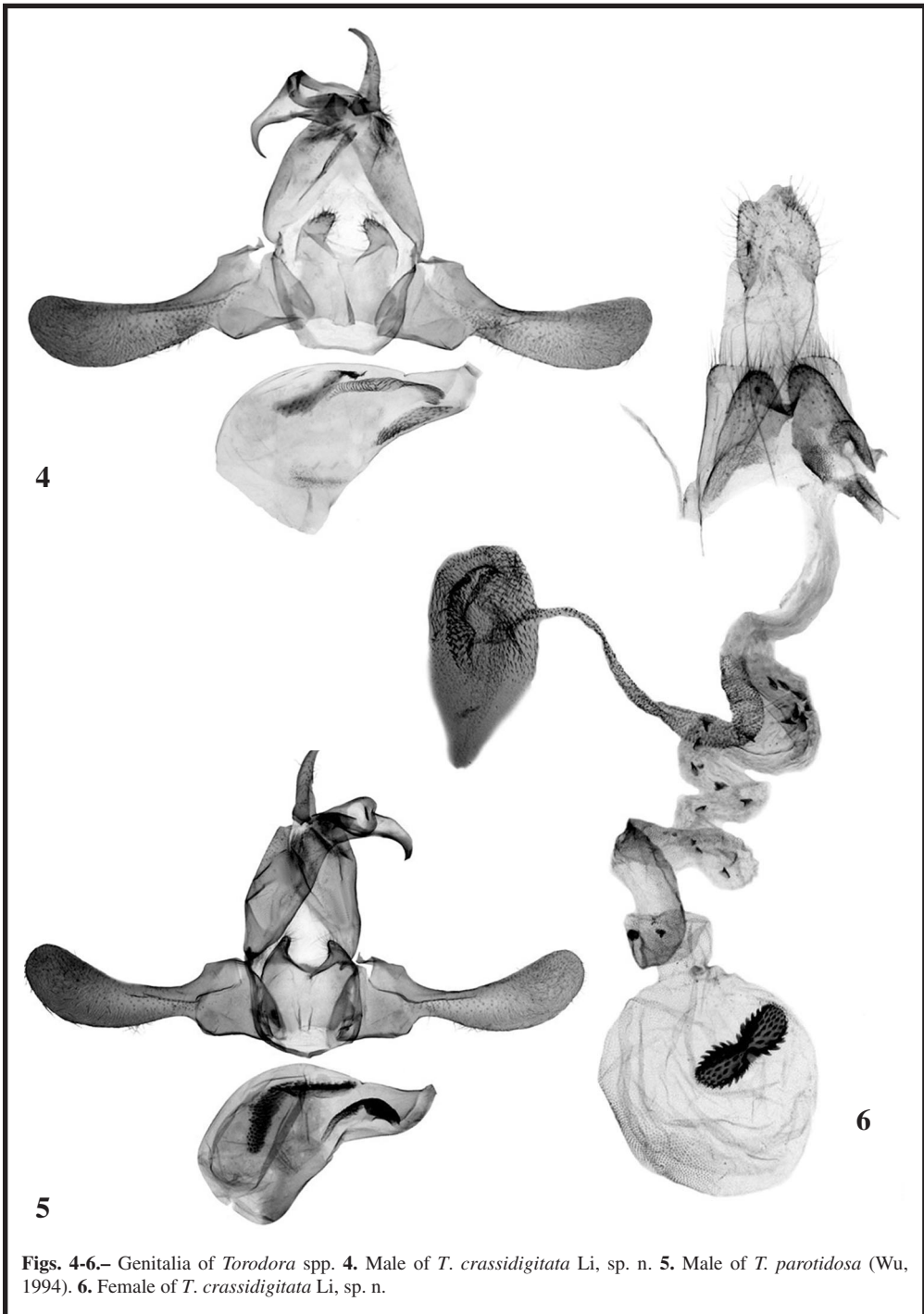
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Figs. 1-3.- Adults of *Torodora* spp. 1-1a. *T. crassidigitata* Li, sp. n. ♂. 2-2a. *T. parotidosa* (Wu, 1994), ♂. 3. *T. crassidigitata* Li, sp. n. ♀.



Figs. 4-6.— Genitalia of *Torodora* spp. **4.** Male of *T. crassidigitata* Li, sp. n. **5.** Male of *T. parotidosa* (Wu, 1994). **6.** Female of *T. crassidigitata* Li, sp. n.